

## INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.: BP0306-US  
 APPLICANT: Dey et al.  
 SERIAL NO.: 10/751,354  
 FILING DATE: January 5, 2004  
 GROUP: 1624

## US PATENT DOCUMENTS

EXAM. INIT.		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
TS	AA	3,860,581	Jan. 14, 1975	Nudelman et al.	260	239.3D	Dec. 27, 1972
	AB	5,780,232	July 14, 1998	Arlinghaus et al.	435	6	May 28, 1996
	AC	6,027,890	Feb. 22, 2000	Ness et al.	435	6	July 22, 1997
	AD	6,156,527	Dec. 5, 2000	Schmidt et al.	435	24	Jan. 23, 1998
	AE	6,312,893	Nov. 6, 2001	Van Ness et al.	435	6	July 22, 1997
	AF	6,319,476	Nov. 20, 2001	Victor, Jr. et al.	422	103	Mar. 2, 1999
	AG	6,329,180	Dec. 11, 2001	Garvin	435	91.2	Mar. 11, 1999
	AH	6,403,309	June 11, 2002	Iris et al.	435	6	Mar. 19, 1999
	AI	6,428,956	Aug. 6, 2002	Crooke et al.	435	6	May 12, 1998
	AJ	6,472,156	Oct. 29, 2002	Wittwer et al.	435	6	Aug. 30, 2000
	AK	6,613,508	Sep. 2, 2003	Ness et al.	435	6	Jul. 22, 1997
	AL	6,629,040	Sep. 30, 2003	Goodlett et al.	702	23	Mar. 20, 2000
	AM	6,750,061	June 15, 2004	Chait et al.	436	89	April 5, 2001
TS	AN	US2002/0119456	Aug. 29, 2002	Ness et al.	435	6	May 14, 2001
TS	AO	US2003/0077595	April 24, 2003	Van Ness et al.	435	6	Oct. 24, 2001

## FOREIGN PATENT DOCUMENTS

EXAM. INIT.		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION YES   NO
TS	BA	WO94/15944	Jul. 21, 1994	WIPO			
	BB	WO97/11958	April 3, 1997	WIPO			
	BC	WO98/15648	Dec 19, 1996	WIPO			
	BD	WO98/31830	Jun 11, 1998	WIPO			
	BE	WO98/32876	July 30, 1998	WIPO			
	BF	WO99/05319	May 6, 1999	WIPO			
	BG	WO00/11208	Mar. 2, 2000	WIPO			
	BH	WO02/14867	Feb. 21, 2002	WIPO			
	BI	WO01/86296	Nov. 15, 2001	WIPO			
	BJ	WO03/001206	Jan. 3, 2003	WIPO			
	BK	WO03/025576	Mar 27, 2003	WIPO			
	BL	WO03/040288	May 15, 2003	WIPO			
	BM	WO03/077851	Sep. 25, 2003	WIPO			
	BN	EP 0261804	Aug. 25, 1987	EPO			
	BO	EP 0990047	July 22, 1998	EPO			
TS	BP	EP 1027454	Jan. 8, 1998	EPO			

TS	CA	Aebersold, R. et al. "Mass Spectrometry in Proteomics". <i>Chem Rev.</i> 101, 269-295 (2001)
	CB	Al-Shahrour, F. et al. "FatiGO: A Web Tool For Finding Significant Associations of Gene Ontology Terms With Groups of Genes (fatigo.bioinfo.cnio.es)". <i>Bioinformatics</i> , 20, 578-580 (2004)
	CC	Alving, K. et al. "Characterization of O-Glycosylation Sites in MUC2 Glycopeptides by NanoElectrospray QTOF Mass Spectrometry". <i>Journal of Mass Spectrometry</i> , 34, 395-407 (1999)
	CD	Anderegg, R. et al. "Mass Spectrometric Characterization of a Protein-Ligand Interaction". <i>J. Am. Chem. Soc.</i> , 117, 1374-1377 (1995)
	CE	Banks, R. E. et al. "Evidence for the existence of a novel pregnancy-associated soluble variant of the vascular endothelial growth factor receptor, Flt-1". <i>Molecular Human Reproduction</i> , 4, 377-386 (1998)
	CF	Bates, G. et al. "Selective and Direct Activation of O-Esters. Conversion of Phenyl and 2,2,2-Trifluoroethyl Esters Into Acyl Imidazolides". <i>Tetrahedron Letters</i> , 49, 4423-4426 (1976)
	CG	Beck-Sickinger, A. et al. "Epitope mapping: synthetic approaches to the understanding of molecular recognition in the immune system". <i>Pharmaceutical ACTA Helvetica</i> , 68, 3-20 (1993)
TS	CH	Benard, P. et al. "Homogeneous Multiplex Genotyping of Hemochromatosis Mutations with Fluorescent Hybridization Probes". <i>American Journal of Pathology</i> , 4, 1055-1061 (1998)

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65	CI	Biemann, K. et al. "Primary Structure of Peptides and Proteins". <i>Biological Mass Spectrometry</i> , 275-297 (1994)
	CJ	Biswas, A. et al, "Rearrangement of N-(p-Toluenesulfonyloxy)-2-Pyrrolidinone". <i>Heterocycles</i> , 11, 2849-2851 (1987)
	CK	Chase B.H. et al. "The Synthesis of C-Labelled Diethylcarbamazine, 1-Diethylcarbamyl-4-methylpiperazine ("Hetrazan") ". <i>The Journal of The Chemical Society</i> , 3874-3877 (1953)
	CL	Chu, Y. et al. "Affinity Capillary Electrophoresis-Mass Spectrometry for Screening Combinatorial Libraries". <i>J. Am. Chem. Soc.</i> 118, 7827-7835 (1996)
	CM	Chu, Y. et al. "Free Solution Identification of Candidate Peptides from Combinatorial Libraries by Affinity Capillary Electrophoresis/Mass Spectrometry". <i>J. Am. Chem. Soc.</i> 117, 5419-5420 (1995)
	CN	Chu, Y. et al. "Using Affinity Capillary Electrophoresis To Identify the Peptide in a Peptide Library that Binds Most Tightly to Vancomycin". <i>J. Org. Chem.</i> 58, 648-652 (1993)
	CO	Cotterill, L. et al. "Qa-1 interaction and T cell recognition of the Qa-1 determinant modifier peptide". <i>Eur. J. Immunol.</i> - 27, 2123-2132 (1997)
	CP	Dunayevskiy, Y. et al, "Application of capillary electrophoresis-electrospray ionization mass spectrometry in the determination of molecular diversity". <i>Proc. Natl. Acad. Sci. USA</i> , 93, 6152-6157 (1996)
	CQ	Ecker, D. et al. "Combinatorial Drug Discovery: Which Methods Will Produce the Greatest Value?" <i>Biotechnology</i> , 13, 351-360 (1995)
	CR	Eng, J. et al. " An Approach to Correlate Tandem Mass Spectral Data of Peptides With Amino Acid Sequences in a Protein Database". <i>J. Am. Soc. Mass Spectrom.</i> , 5, 976-989 (1994)
	CS	Epton, R. "Peptides. Synthesis. Solid Phase Methods". <i>Innovation and Persepectives in Solid Phase Synthesis</i> . 57-63 (1990)
	CT	Fatica, A. et al. " Making Ribosomes". <i>Curr. Opin. Cell Biol.</i> , 14, 313-318 (2002)
	CU	Gao, J. et al. "Screening Derivated Peptide Libraries for Tight Binding Inhibitors to Carbonic Anhydrase II by Electrospray Ionization-Mass Spectrometry." <i>J. Med. Chem.</i> 39, 1949-1955 (1996)
	CV	Geysen, H. et al. "Isotope or mass encoding of combinatorial libraries". <i>Chemistry &amp; Biology</i> , 3, 679-688 (1996)
	CW	Gerber, S.A. et al. "Absolute Quantification of Proteins and Phosphoproteins From Cell Lysates by Tandem MS". <i>Proc. Natl. Acad. Sci.</i> , 100, 6940-6945 (2003)
	CX	Goodlett, D. et al. "Reduced Elution Speed Detection for Capillary Electrophoresis/Mass Spectrometry". <i>J. Microl Sep</i> , 5, 57-62 (1993)
	CY	Gonzalez, C.I. et al. " Nonsense-mediated mRNA Decay in <i>Saccharomyces Cerevisiae</i> ". <i>Gene</i> , 274, 15-25 (2001)
	CZ	Goshe, M.B. et al. "Stable Isotope-Coded Proteomic Mass Spectrometry". <i>Curr Opin Biotechnol.</i> , 14, 101-109 (2003)
	DA	Griffin, T.J. et al. " Complementary Profiling of Gene Expression at the Transcriptome and Proteome Levels in <i>Saccharomyces Cerevisiae</i> ". <i>Mol. Cell Proteomics</i> , 1, 323-333 (2002)
	DB	Gygi, S.P. et al. "Correlation Between Protein and mRNA Abundance In Yeast". <i>Mol. Cell Biol.</i> , 19, 1720-1730 (1999)
	DC	Gygi S.P. et al. "Quantitative Analysis of Complex Protein Mixtures Using Isotope-Coded Affinity Tags". <i>Nat. Biotechnol.</i> , 17, 994-999 (1999)
	DD	Han, S. et al. "HLA-DO is a negative modulator of HLA-DM-mediated MHC class II peptide loading". <i>Current Biology</i> , 7, 950-957 (1997)
	DE	Han, D.K. et al. "Quantitative Profiling of Differentiation-induced Microsomal Proteins Using Isotype-Coded Affinity Tags and Mass Spectrometry". <i>Natl. Biotechnol.</i> , 19, 946-951 (2001)
	DF	Hanley, S. et al. "Re-evaluation of the primary structure of <i>Ralstonia eutropha</i> phasing and implications for polyhydroxyalkanoic acid granule binding". <i>FEBS Letters</i> , 447, 99-105 (1999)
	DG	Harris et al. "An Improved Synthesis of 1-Methyl-2,5-piperazinedione". <i>J. Heterocyclic Chem.</i> 18, 423-424 (1981)
	DH	He, F. et al. "Genome-Wide Analysis of mRNA's Regulated by the Nonsense-mediated and 5' to 3' mRNA Decay Pathways in Yeast. <i>Mol. Cell</i> , 12, 1439-1452 (2003)
	DI	Henion, J. et al. "Mass Spectrometric Investigations of Drug-Receptor Interactions". <i>Therapeutic Drug Monitoring</i> , 15, 563-569 (1993)
	DJ	Henry, N.L. et al. Purification and Characterization of Yeast RNA Polymerase II General Initiation Factor g. <i>J. Biol. Chem.</i> 267, 23388-23392 (1992)
	DK	Hentze, M.W. et al. "A Perfect Message: RNA Surveillance And Nonsense-Mediated Decay". <i>Cell</i> , 96, 307-310 (1999).
	DL	Hermanson, G. et al. "The Chemistry of Reactive Groups". <i>Bioconjugate Techniques</i> , Chapter 2, 137-165
	DM	Heyes, M. et al. "( <sup>18</sup> O) Quinolinic Acid: Its Esterification without Back Exchange for Use as Internal Standard in the Quantification of Brain and CSF Quinolinic Acid".
65	DN	Höss, M. et al. "A human DNA editing enzyme homologous to the <i>Escherichia coli</i> DnaQ/MutD protein". <i>The EMBO Journal</i> , 18, 3868-3875 (1999)

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E	DO	Hughs, I. Et al. "Design of Self-Coded Combinatorial Libraries To Facilitate Direct Analysis of Ligands by Mass Spectrometry". <i>J. Med. Chem.</i> , <b>41</b> , 3804-3811 (1998)
	DP	Hsu, C. et al. "Yeast cells lacking 5'-3' Exoribonuclease 1 Contain mRNA Species That are Poly (A) Deficient and Partially Lack The 5' Cap Structure. <i>Mol. Cell. Biol.</i> , <b>13</b> , 4826-4835 (1993)
	DQ	Ibarrola, N. et al. "A Novel Proteomic Approach For Specific Identification of Tyrosine Kinase Substrates Using <sup>13</sup> C-Labeled Tyrosine. <i>J. Biol. Chem.</i> In press (2004)
	DR	Ju, Q. et al. "REB1, a Yeast DNA-Binding Protein With Many Targets, is Essential For Growth and Bears Some Resemblance to the Oncogene myb". <i>Mol. Cell Biol.</i> , <b>10</b> , 5226-5234 (1990)
	DS	Jung, g. et al. "Multiple Peptide Synthesis Methods and Their Applications". <i>Angewandte Chemie</i> , <b>31</b> , 367-486 (1992)
	DT	Karimi-Busheri, F. et al. "Molecular Characterization of a Human DNA Kinase". <i>The Journal of Biological Chemistry</i> , <b>274</b> , 24187-24194 (1999)
	DU	Kondo, H. et al. "p47 is a cofactor for p97-mediated membrane fusion". <i>Nature</i> , <b>388</b> , 75-78 (1997)
	DV	Köster, H. et al. "A strategy for rapid and efficient DNA sequencing by mass spectrometry". <i>Nature Biotechnology</i> , <b>14</b> , 1123-1128 (1996)
	DW	Krusic, P. et al. "Electron Spin Resonance Studies of Fluoroalkyl Radicals in Solution. III. Photolysis of Perfluoroketones and Adduct Formation". <i>The Journal of Physical Chemistry</i> , <b>78</b> , 2036-2041 (1974)
	DX	Kurihara, T. et al. "Sec24p and Iss1p Function Interchangeably in Transport Vesicle Formation From The Endoplasmic Reticulum in <i>Saccharomyces Cerevisiae</i> ". <i>Mol. Biol. Cell</i> , <b>11</b> , 983-998 (2000)
	DY	Maderazo, A.B. et al. "Upf1p Control of Nonsense mRNA Translation is Regulated by Nmd2p and Upf3p". <i>Mol. Cell Biol.</i> , <b>20</b> , 4591-4603 (2000)
	DZ	Mak, M. et al. "Stability of Asp-Pro Bond Under High and Low Energy Collision Induced Dissociation Conditions in the Immunodominant Epitope Region of Herpes Simplex Virion Glycoprotein D". <i>Rapid Commun. Mass Spectrom.</i> , <b>12</b> , 837-842 (1998)
	EA	Mangus, D.A. et al. "Ppb 1, A Factor Interacting With <i>Saccharomyces Cerevisiae</i> Poly(A)-Binding Protein, Regulates Polyadenylation". <i>Mol. Cell Biol.</i> , <b>18</b> , 7383-7396 (1998)
	EB	Martinovic S. et al. "Selective Incorporation of Isotopically Labeled Amino Acids For Identification of Intact Proteins on a Proteome-Wide Level". <i>J. Mass Spectrom.</i> , <b>37</b> , 99-107 (2002)
	EC	Masselon, C. et al. "Accurate Mass Multiplexed Tandem Mass Spectrometry for High-Throughput Polypeptide Identification from Mixtures". <i>Anal. Chem.</i> , <b>72</b> , 1918-1924 (2000)
	ED	Metzger, J. et al. "Analytical methods for the characterization of synthetic peptide libraries". <i>Peptides</i> , 481-482 (1992)
	EE	Metzger, J. et al. "Electrospray Mass Spectrometry and Tandem Mass Spectrometry of Synthetic Multicomponent Peptide Mixtures: Determination of Composition and Purity". <i>Analytical Biochemistry</i> , <b>219</b> , 261-277 (1994)
	EF	Metzger, J. et al. "Ion-Spray Mass Spectrometry and High-Performance Liquid Chromatography-Mass Spectrometry of Synthetic Peptide Libraries". <i>Angew. Chem. Int. Ed. Engl.</i> , <b>6</b> , 894-896 (1993)
	EG	Moore, R. et al. "A Microscale Electrospray Interface Incorporating a Monolithic, Poly(styrene-divinylbenzene) Support for On-Line Liquid Chromatography/Tandem Mass Spectrometry Analysis of Peptides and Proteins". <i>Anal. Chem.</i> <b>70</b> , 4879-4884 (1998)
	EH	Nawrocki, J. et al. "Analysis of Combinatorial Libraries Using Electrospray Fourier Transform Ion Cyclotron Resonance Mass Spectrometry". <i>Rapid Communication in Mass Spectrometry</i> , <b>10</b> , 1860-1864 (1996)
	EI	Nazarpack-Kandousy, N. et al. "Regiochemical Tagging: A New Tool for Structural Characterization of Isomeric Components in Combinatorial Mixtures". <i>J. Am. Chem. Soc.</i> , <b>122</b> , 3358-3366 (2000)
	EJ	Needels M. et al. "Generation and screening of an oligonucleotide-encoded synthetic peptide library". <i>Proc. Natl. Acad. Sci. USA</i> , <b>90</b> , 10700-10704 (1993)
	EK	Nestler, H. et al. "A General Method for Molecular Tagging of Encoded Combinatorial Chemistry Libraries". <i>J. Org. Chem.</i> , <b>59</b> , 4723-4724 (1994)
	EL	Nikolaiev, V. et al. "Peptide-Encoding For Structure Determination of Nonsequence-able Polymers Within Libraries Synthesized and Tested on Solid-Phase Supports". <i>Peptide Research</i> , <b>3</b> , 161-170, (1994)
	EM	Nutiu, R. et al. "Tripartite Molecular Beacons". <i>Nucleic Acids Research</i> , <b>18</b> , 1-9 (2002)
	EN	Ohlmeyer, M. et al. "Complex synthetic chemical libraries indexed with molecular tags". <i>Proc. Natl. Acad. Sci. USA</i> , <b>90</b> , 10922-10926 (1993)
	EO	Olejnik, J. et al. "Photocleavable biotin phosphoramidite for 5'-end labeling, affinity purification and phosphorylation of synthetic oligonucleotides". <i>Nucleic Acids Research</i> , <b>24</b> , 361-366 (1996)
	EP	Olejnik, J. et al. "Photocleavable peptide-DNA conjugates: synthesis and applications to DNA analysis using MALDI-MS". <i>Nucleic Acids Research</i> , <b>23</b> , 4626-4631 (1999)
	EQ	Ong, S.E. et al. "Properties of <sup>13</sup> C-Substituted Arginine in Stable Isotope Labeling By Amino Acids In Cell Culture (SILAC)". <i>J. Proteome Res.</i> <b>2</b> , 173-181 (2003)
	ER	Ong, S.E. et al. "Stable Isotope Labeling By Amino Acids In Cell Culture SILAC, as a Simple And Accurate Approach to Expression Proteomics". <i>Mol. Cell Proteomics</i> , <b>1</b> , 376-386 (2002)
E	ES	Parker, K.C. et al. "Depth of Proteome Issues: A Yeast ICAT Reagent Study". <i>Mol. Cell Proteomics</i> , In Press (2004)

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<i>ES</i>	ET	Pitha, J. et al. "Synthetic Analogs of Nucleic Acids". <i>Biomedical Polymers</i> , 271-297 (1980)
	EU	Perkins, D.N. et al. "Probability-Based Protein Identification By Searching Sequence Databases Using Mass Spectrometry Data". <i>Electrophoresis</i> , 20, 3551-3567 (1999)
	EV	Peterson, C.L. et al. "Characterization of the Yeast SWI1, SWI2, and SWI3 Genes, Which encode a Global Activator of Transcription". <i>Cell</i> , 68, 573-583 (1992)
	EW	Przybylski, M. et al. "Mass spectrometric approaches to molecular characterization of protein-nucleic acid interactions". <i>Toxicology Letters</i> , 82/83, 567-575 (1995)
	EX	Qiu, Y. et al. "Acid-Labile Isotope-Coded Extractants: A Class of Reagents for Quantitative Mass Spectrometric Analysis of Complex Protein Mixtures". <i>Analytical Chemistry</i> , 19, 4969-4979
	EY	Rao, T. et al. "TFA-NHS as bifunctional protecting agent: simultaneous protection and activation of amino carboxylic acids". <i>Tetrahedron Letters</i> , 43, 7793-7795 (2002)
	EZ	Rautio, J. et al. "Synthesis And In Vitro Evaluation Of Novel Morpholinyl- and Methylpiperazinylacyloxyalkyl Prodrugs of 2-(6-Methoxy-2-naphthyl)propionic Acid (Naproxen) for Topical Drug Delivery". <i>J. Med. Chem.</i> , 43, 1489-1494 (2000)
	FA	Ross, C. et al. "Two Dimensional Fourier Transform Ion Cyclotron Resonance Mass Spectrometry/Mass Spectrometry with Stored-Waveform Ion Radius Modulation". <i>J. Am. Chem. Soc.</i> , 115, 7854-7861 (1993)
	FB	Sadler, I. et al. "A Yeast Gene Important For Protein Assembly Into the Endoplasmic Reticulum and the Nucleus Has Homology to Dnaj, an Escherichia Coli Heat Shock Protein". <i>J. Cell Biol.</i> , 109, 2665-2675 (1989)
	FC	Saghatelyan, A. et al. "DNA Detection and Signal Amplification via an Engineered Allosteric Enzyme". <i>J. Am. Chem. Soc.</i> , 125, 344-345 (2003)
	FD	Sakakibara S. et al., "A New Reagent For The P-Nitrophenylation of Carboxylic Acids". <i>Bulletin of The Chemical Society of Japan</i> , 8, 1231-1232 (1964)
	FE	Sakakibara, S. et al., "The Trifluoroacetate Method of Peptide Synthesis I. The Synthesis and Use of Trifluoroacetate Reagents". <i>The Synthesis and Use of Trifluoroacetate Reagents</i> , 11, 1979-1983 (1965)
	FF	Schröter, M. et al. "Genotyping of Hepatitis C Virus Types 1,2,3 and 4 by a One-Step LightCycler Method Using Three Different Pairs of Hybridization Probes". <i>Journal of Clinical Microbiology</i> , 6, 2046-2050 (2002)
	FG	Shevchenko, A. et al. "MALDI Quadrupole Time-of-Flight Mass Spectrometry: A Powerful Tool for Proteomic Research". <i>Anal. Chem.</i> , 72, 2132-2141 (2000)
	FH	Shevchenko, A. et al. "Rapid 'de Novo' Peptide Sequencing By a Combination of Nanoelectrospray, Isotopic Labeling and a Quadrupole/Time-of-Flight Mass Spectrometer". <i>Rapid Comm. In Mass Spectro.</i> , 11, 1015-1024 (1997)
	FI	Sickinger, A. et al. "Epitope mapping: synthetic approaches to the understanding of molecular recognition in the immune system". <i>Pharmaceutical ACTA Helvetica</i> , 68, 3-20 (1993)
	FJ	Stacey, M. et al. "A General Method of Esterification Using Trifluoracetic Anhydride". <i>Nature</i> , 8, 705
	FK	Stevanovic, S. et al. "Multiple Sequence Analysis: Pool Sequencing of Synthetic and Natural Peptide Libraries". <i>Analytical Biochemistry</i> , 212, 212-220 (1993)
	FL	Stevanovic, S. et al. "Natural and Synthetic Peptide Pools: Characterization by Sequencing and Electrospray Mass Spectrometry". <i>Bioorganic &amp; Medical Chemistry Letters</i> , 3, 431-436 (1993)
	FM	Stevens, A. et al. "Fragments of the Internal Transcribed Spacer 1 or Pre-rRNA Accumulate in <i>Saccharomyces Cerevisiae</i> Lacking 5'-3' Exoribonuclease 1". <i>J. Bacteriol.</i> , 173, 7024-7028 (1991)
	FN	Tao, W.A. et al. "Advances in Quantitative Proteomics Via Stable Isotope Tagging and Mass Spectrometry". <i>Curr Opin Biotechnol.</i> , 14, 110-118 (2003)
	FO	Thomas, D. et al. "Y SAM2 Encodes The Second Methionine S-Adenosyl Transferase in <i>Saccharomyces Cerevisiae</i> : Physiology and Regulation of Both Enzymes". <i>Mol. Cell Biol.</i> , 8, 5132-5139 (1988)
	FP	Thompson, A. et al. "Tandem Mass Tags: A Novel Quantification Strategy for Comparative Analysis of Complex Protein Mixtures by MS/MS". <i>Anal. Chem.</i> , 75, 1895-1904 (2003)
	FQ	Tugay, T. et al. "The Orc4p and Orc5p Subunits of the Xenopus and the Human Origin Recognition Complex Are Related to Orc1p and Cdc6p". <i>Journal of Biological Chemistry</i> , 273, 32421-32429 (1998)
	FR	Veenstra, T. et al. "Proteome Analysis Using Selective Incorporation of Isotopically Labeled Amino Acids". <i>American Soc. For Mass. Spect.</i> , 11, 78-82 (2000)
	FS	Wagner, D. et al. "Ratio Encoding Combinatorial Libraries with Stable Isotopes and their Utility in Pharmaceutical Research". <i>Combinational Chemistry &amp; High Throughput Screening</i> , 3, 143-153 (1998)
	FT	Washburn, M.P. et al. "Reproducibility of Quantitative Proteomic Analyses of Complex Biological Mixtures by Multidimensional Protein Identification Technology". <i>Anal. Chem.</i> , 75, 5054-5061 (2003)
	FU	Wentworth, P. et al. "Generating and analyzing combinatorial chemistry libraries". <i>Analytical Chemistry</i> , 70, 109-115 (1998)
	FV	Wegierski, T. et al. "Bms1p, a G-domain-containing protein, Associates with Rcl1p and is Required For 18S rRNA Biogenesis in Yeast". <i>RNA</i> , 7, 1254-1267 (2001)
	FW	Wieboldt, R. et al. "Immunoaffinity Ultrafiltration with Ion Spray HPLC/MS for Screening Small-Molecule Libraries". <i>Analytical Chemistry</i> , 69, 1683-1691 (1997)
	FX	Williams, E. et al. "Hadamard Transform Measurement of Tandem Fourier-Transform Mass Spectra". <i>Anal. Chem.</i> , 62, 698-703 (1990)
<i>ES</i>	FY	Winger, B. et al. "Characterization of Combinatorial Peptide Libraries by Electrospray Ionization Fourier Transform Mass Spectrometry". <i>Rapid Comm. In Mass Spectrometry</i> , 10, 1811-1813 (1996)

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<i>B</i>	FZ	Wissner, A. et al, "Reaction of tert-Butyldimethylsilyl Esters with Oxalyl Chloride-DimethylformamideL Preparation of Carboxylic Acid Chlorides Under Neutral Conditions". <i>J. Org. Chem.</i> <b>43</b> , 3972-3974 (1978)
	GA	Yates, J.R. "Mass Spectrometry From genetics To Proteomics". <i>TIG</i> , <b>16</b> , 5-8 (2000)
	GB	Yates, J.R. "Database Searching Using Mass Spectrometry Data". <i>Electrophoresis</i> , <b>19</b> , 893-900 (1998)
	GC	Yates, N.E et al. "A novel N-terminal derivative designed to simplify peptide fragmentation". <i>Proceedings of the 43<sup>rd</sup> ASMS Conference of Mass Spectrometry and Allied Topics, Atlanta, Georgia</i> (May 21-26) (1996)
	GD	Young, J.D. et al. "Thymosin B 4 sulfoxide is an anti-inflammatory agent generated by monocytes in the presence of glucocorticoids". <i>Nature Medicine</i> , <b>12</b> , 1424-1427
	GE	Young, P. et al. "Alternative Mobile Phases For Enhanced HPLC Peptide Mapping". <i>Millipore Bioforum</i> , <b>4</b> , (1993)
	GF	Zhang, X. et al. "B=N-Terminal peptide labeling strategy for incorporation of isotopic tags: a method for the determination of site-specific absolute phosphorylation stoichiometry". <i>Rapid Comm. In Mass Spec.</i> , <b>16</b> , 2325-2332 (2002)
	GG	Zhong, T. et al. "The Yeast SIS 1 Protein, a DnaJ Homolog, is Required For The Initiation of Translation. <i>Cell</i> , <b>73</b> , 1175-1186 (1993)
<i>B</i>	GH	Zhou, H. et al. "Quantitive proteome analysis by solid-phase isotope tagging and mass spectrometry". <i>Nature Biotechnology</i> , <b>19</b> , 512-515 (2002)

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BP0306-US

JRW

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application Serial No: 10/751,354  
Date Filed: January 5, 2004  
Application Title: Active Esters of N-Substituted Piperazine Acetic Acids,  
Including Isotopically Enriched Versions Thereof  
Applicants: Dey et al.  
Group Art Unit: 1624  
Examiner: Not Assigned  
Certified Mail No.: 7004 0750 0001 7771 6164

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37 C.F.R. § 1.8

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Brian D. Gildea  
Reg. No. 39,995

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Commissioner For Patents  
Washington, DC 20231

Dear Sir or Madam:

INFORMATION DISCLOSURE STATEMENT

In accordance with 37 C.F.R. 1.97, Applicant(s) hereby make of record the following information and publications. Copies of PTO Form 1449 and each publication listed thereon [INCLUDE REFERENCE CODE, E.G., (U.S. PATENTS: AA through AO); (BA - BP FOREIGN PATENTS) &/OR (CA - GH JOURNAL ARTICLES ETC.)] accompany this statement, either in the entirety or in the relevant parts. The documents identified herein are NOT admitted as being prior art.

FEE

Since this correspondence is being mailed within three months of the filing date or before any Office Action on the merits has been received, it is believed that no fee is due for consideration of the documents contained herein. If however The Office determines that a fee is due for consideration of this Information Disclosure Statement, The Office is hereby authorized to deduct any appropriate fee due for the entry of this paper into the file from Deposit Account 02-3240.

If not already done, please match this application with the customer number identified below.

**Customer Number 023544**

Respectfully submitted,

Date: Aug 9, 2004

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U.S. DEPARTMENT OF COMMERCE, PATENT AND TRADEMARK OFFICE				Atty Docket No.	Application No.		
				BP0306-US	10/751,354		
O P E U P S REFERENCES CITED BY APPLICANTS				Applicant			
SEP 22 2006 (Use several sheets if necessary)				Dey, Subhakar et al.			
				Filing Date	Group		
				01/05/2004	1624		
U.S. PATENT DOCUMENTS							
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
<i>ES</i>	AP	US05/0049406	03 March 2005	Lerchen et al			
<i>ES</i>	AQ	6,824,981	30 Nov 2004	Chait et al			
FOREIGN PATENT DOCUMENTS							
		DOCUMENT Number	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION
<i>ES</i>	BQ	0209763	01 July 1986	EP			<input checked="" type="checkbox"/> <input type="checkbox"/>
<i>ES</i>	BR	WO04/086050	07 Oct 2004	WIPO			x
<i>ES</i>	BS	WO01/68664	20 Sept 2001	WIPO			x
OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)							
<i>ES</i>	GI	PCT International Search Report and Written Opinion mailed 10 August 2006					
	GJ	Bartlett Jones, M., et al., "Peptide Ladder Sequencing by Mass Spectrometry Using a Novel, Volatile Degradation Reagent", Rapid Communications in Mass Spectrometry, Vol 8, 737-742 (1994)					
	GK	Day, Richard et al, "N-Terminal Groups in Mass Spectrometry of Peptides. A Study Including Some New and Useful Derivatives", J. Org. Chem., Vol 38, No. 4, 1975 782-788					
	GL	Golding, Bernard T. et al. "Chemistry of Nitrogen Mustard [2-Chloro-N0(2-chloroethyl)-N-methylethanamine] studied by Nuclear Magnetic Resonance Spectroscopy", J. Chem Soc. Perkin Trans. II 1987, pp 705-713					
	GM	Huang, Yulin et al, "A Method for High Efficiency Peptide Sequencing Using Combined Enzymatic Digestion and Chemical Derivatization on MALDI MSMS", Applied Biosystems Poster Number 1159					
	GN	Ross, Philip et al, "Investigation of Chemical Derivatization for Peptide CID Using LC-MALDI TOF MS/MS", Applied Biosystems Poster Number ThPF 250					
	GO	Roth, Kenneth et al, "Charge Derivatization of Peptides for Analysis by Mass Spectrometry", Mass Spectrometry Reviews, 1998, 17, 255-274					
<i>ES</i>	GP	Sherman, Nicholas et al, "A Novel N-Terminal Derivative Designed to Simplify Peptide Fragmentation", Proceedings of the 43rd ASMS Conference on Mass Spectrometry and Allied Topics, Atlanta, Georgia, May 21-26 1995, pp 626-627					

*Subhakar Dey 8/21/07*

<i>B</i>	GQ	Shetty, Umeha H. et al, "Piperazine Ring Cleavage in the Electron Impact Induced Fragmentation of Piperazine Type Phenothiazine Antipsychotic Agents", Biomedical Mass Spectrometry, Vol 10, No. 11, 1983, pp 601-607
Examiner	<i>henschdack</i>	
	Date Considered	<i>3/27/07</i>
<b>*EXAMINER:</b> Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with your communication to applicant.		



Tfw

Case No. BP0306-US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 10/751,354 Confirmation No.:2231

Applicant(s) : Dey, Subhakar et al.

Filed : 01/05/2004

TC/A.U. : 1624

Examiner : To be assigned

For : Active Esters of N-Substituted Piperazine Acetic Acids, Including Isotopically enriched versions Thereof

Customer No. : 23544

CERTIFICATE OF MAILING	
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on	
Date of Deposit:	9-20-06
Signature:	<i>Patricia E. Tocci</i>
Type Name of Depositing Party: Patricia E. Tocci	

**INFORMATION DISCLOSURE STATEMENT**

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Applicants submit herewith patents, publications or other information (listed on the attached Form PTO/SB/08A) of which they are aware, which may be material to the examination of this application and in respect of which there may be a duty to disclose in accordance with 37 CFR §1.56.

This Information Disclosure Statement:

- (a) [ ] accompanies a new patent application submitted herewith.
- (b) [ ] is filed within three months after the filing date of the application or within three months after the date of entry of the national stage of a PCT application as set forth in 37 CFR §1.491.
- (c) [x] as far as is known to the undersigned, is filed before the mailing date of a first Office action on the merits.

- (d) [ ] as far as is known to the undersigned, is filed before the mailing date of a first Office action after the filing of a request for continued examination under § 1.114.
- (e) [ ] is filed after the first Office Action and more than three months after the application's filing date or PCT national stage date of entry filing but, as far as is known to the undersigned, prior to the mailing date of either a final action under § 1.113, a notice of allowance under § 1.311, whichever occurs first, and is accompanied by either the fee (\$180) set forth in 37 CFR §1.17(p) or a certification as specified in 37 CFR §1.97(e), as checked below. Should any fee be due, the U.S. Patent and Trademark Office is hereby authorized to charge Deposit Account No. 01-2213 in the amount of \$180.00 to cover the cost of this Information Disclosure Statement. Any deficiency or overpayment should be charged or credited to this deposit account. A duplicate of this sheet is enclosed.
- (f) [ ] is filed after the mailing date of either a final rejection or a notice of allowance, but on or before the payment of the issue fee, and is accompanied by the fee (\$180) set forth in 37 CFR §1.17(i)(1) and a certification as specified in 37 CFR §1.97(e), as checked below. This document is to be considered as a petition requesting consideration of the information disclosure statement. The U.S. Patent and Trademark Office is hereby authorized to charge Deposit Account No. 01-2213 in the amount of \$180.00 to cover the cost of this Information Disclosure Statement. Any deficiency or overpayment should be charged or credited to this deposit account. A duplicate of this sheet is enclosed.

[If either of boxes (e) or (f) is checked above, the following "certification" under 37 CFR §1.97(e) may need to be completed.] The undersigned certifies that:

- [ ] Each item of information contained in the information disclosure statement was first cited in a communication mailed from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this information disclosure statement.
- [ ] No item of information contained in this information disclosure statement was cited in a communication mailed from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned after making reasonable inquiry, was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this information disclosure statement.

A copy of the items on PTO/SB/08A that are not United States Publications:

[x] are supplied herewith

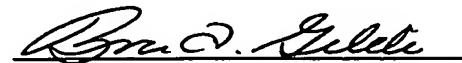
[ ] are not supplied because they were previously cited by or submitted to the Office in prior application Serial No. \_\_\_\_\_, filed \_\_\_\_\_ and relied upon in this application for an earlier filing date under 35 USC §120.

While the information and references disclosed in this Information Disclosure Statement may be "material" pursuant to 37 CFR §1.56, it is not intended to constitute an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

In accordance with 37 CFR §1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR §1.56(a) exists. It is submitted that the Information Disclosure Statement is in compliance with 37 CFR §1.98 and MPEP §609 and the Examiner is respectfully requested to consider the listed references.

Respectfully submitted,

Date: Sept 20, 2006



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U.S. DEPARTMENT OF COMMERCE, PATENT AND TRADEMARK OFFICE			Atty Docket No.	Application No.				
			BP0306-US	10/751,354				
REFERENCES CITED BY APPLICANTS <i>(use several sheets if necessary)</i>			Applicant					
			Dey, Subhakar et al.					
JAN 19 2007			Filing Date	Group				
			01/05/2004	1624				
U.S. PATENT DOCUMENTS								
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
<i>ES</i>	AR	7,045,296	5/16/06	Parker et al.				
FOREIGN PATENT DOCUMENTS							TRANSLATION	
		DOCUMENT Number	DATE	COUNTRY	CLASS	SUBCLASS	YES	NO
<i>ES</i>	BT	JP01125357A2	5/1/89				X	
OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)								
<i>ES</i>	GR	PCT/US2005/000223 International Search Report						
Examiner				Date Considered				
<i>Subhakar Dey</i>				<i>31/07/07</i>				



AV

Case No. BP0306-US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 10/751,354  
Applicant(s) : Dey et al.  
Filed : 1/5/04  
TC/A.U. : 1624  
Examiner : To be assigned  
For : Active Esters of N-Substituted Piperazine Acetic Acids, Including Isotopically enriched Versions thereof  
Customer No. : 23544

Confirmation No.: 2231

CERTIFICATE OF MAILING	
I hereby certify that this correspondence is being deposited with the US Postal Service as First Class Mail addressed to Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on	
Date of Deposit:	1-16-07
Signature:	
Name of Depositing Party: Patricia E. Tacci	

INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

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- (d) [ ] as far as is known to the undersigned, is filed before the mailing date of a first

- Office action after the filing of a request for continued examination under § 1.114.
- (e) [ ] is filed after the first Office Action and more than three months after the application's filing date or PCT national stage date of entry filing but, as far as is known to the undersigned, prior to the mailing date of either a final action under §1.113, a notice of allowance under §1.311, whichever occurs first, and is accompanied by either the fee (\$180) set forth in 37 CFR §1.17(p) or a certification as specified in 37 CFR §1.97(e), as checked below. Should any fee be due, the U.S. Patent and Trademark Office is hereby authorized to charge Deposit Account No. 01-2213 in the amount of \$180.00 to cover the cost of this Information Disclosure Statement. Any deficiency or overpayment should be charged or credited to this deposit account. A duplicate of this sheet is enclosed.
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A copy of the items on the Information Disclosure Statement that are not United States Publications:

[ x ] are supplied herewith.

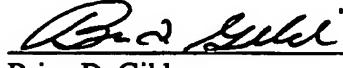
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Respectfully submitted,

Date: Tue 15, 2007

  
\_\_\_\_\_  
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